

REMARKS

Favorable reconsideration and withdrawal of the rejection set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

Claims Status

Claims 1 through 22, 37, 39, and 41 remain pending in the application. Claims 1, 37, 39, and 41 have been amended to even more succinctly define the invention and/or to improve their form. Claims 1, 12, 37, 39, and 41 are the only independent claims pending in the application.

Allowed Claims

It is acknowledged with appreciation that Claims 1 through 22 are allowed.

Section 103 Rejection

Claims 37, 39, and 41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kakimoto for the reasons set forth in the Official Action.

Response to Rejection

The rejection is respectfully traversed.

Amended independent Claim 37 calls for an optical waveguide fabricated from a light-transmissive material that includes a first region having a partial cylindrical shape; and a second region having a partial spherical shape. The second region is provided at an end of the first region. A spherical profile of the second region acts as a concave mirror.

In rejecting the claims, the Examiner refers to Figure 7(a) of Kakimoto and asserts that “regions” 91, 92 correspond to the claimed first and second regions, respectively, of an optical waveguide.

It is respectfully submitted that the Examiner misconstrues Kakimoto, which is not understood to disclose a waveguide including any partial spherical regions. In fact, the elements 91 and 92 of Kakimoto, which the Examiner argues correspond to the first and second regions, are not part of an optical waveguide *per se*. Rather, Kakimoto describes grooves 91 and 92 as being formed in substrate 1. The grooves are provided for positioning an optical waveguide 90 in the substrate and do not constitute any part of the waveguide. As described and shown in Kakimoto, the waveguide 90 does not have the first and second regions, as recited in Claim 37.

The Examiner also asserts with respect to Kakimoto that “the second region [is] at the end of the first region with a partial spherical shape and a curved end portion at 3. Nevertheless, a partial, curved portion of the second region is not explicitly disclosed.” (Emphasis added) The Examiner argues that “[a] change of shape is generally [recognized] as being within the level of ordinary skill in the art.”, citing *In re Daley*, 149 USPQ 47 (CCPA 1976). Thus, according to the Examiner, it would have been obvious to one of ordinary skill in the art to have made the waveguide section with a partial spherical shape. Applicants respectfully disagree. The Examiner does not give full weight to Daley, which holds that a change in shape would only have been found obvious “absent persuasive evidence that the particular configuration of the claimed container was significant.” Id.

In this instance, the claimed shape is a significant aspect of the waveguide, which directly affects the performance of the waveguide. For example, the shape of the waveguide affects the reflection and propagation of light through the waveguide. Specifically, as noted at page 10 of the specification, for example, the partial spherical-shaped end portions of Applicants’ waveguide as a concave mirror. Thus, changing the

shape of a waveguide is not a simple matter of choice, but rather a significant element, which serves to distinguish one waveguide from another waveguide.

Independent Claim 39 calls for an optical interconnection device comprising a light emitting device, a light receiving device, and an optical waveguide as defined in Claim 37.

Independent Claim 41 calls for an optical interconnection device including an optical device and an optical waveguide generally as defined in Claim 37.

It is respectfully submitted that Kakimoto does not show or suggest an optical waveguide *per se* or an optical interconnection including an optical waveguide having first and second regions as recited in Claims 37 39, and 41, respectively.

Without conceding the propriety of the rejection and to even further distinguish the claimed invention over Kakimoto, Claims 37, 39, and 41 have been amended to even further define over Kakimoto. (Support for the spherical profile aspect can be found at least in the last full paragraph at page 10 of the specification.)

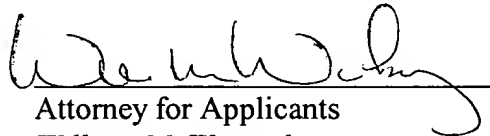
It is respectfully submitted that Claims 37, 39, and 41 are allowable over Kakimoto. Applicants request withdrawal of the rejection based on Kakimoto.

Closing Comments

It is respectfully submitted that all of the claims on file are allowable over the art of record and that the application is in condition for allowance. Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'W. M. Wannisky', is written over a horizontal line.

Attorney for Applicants

William M. Wannisky

Registration No. 28,373

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

WMW\las

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